



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/088,407	03/19/2002	Stefan Grutke	50728	2960

26474 7590 05/05/2004

KEIL & WEINKAUF
1350 CONNECTICUT AVENUE, N.W.
WASHINGTON, DC 20036

EXAMINER

WYROZEBSKI LEE, KATARZYNA I

ART UNIT	PAPER NUMBER
----------	--------------

1714

DATE MAILED: 05/05/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/088,407

Applicant(s)

GRUTKE ET AL.

Examiner

Katarzyna Wyrozebski

Art Unit

1714

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 February 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-15 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

Art Unit: 1714

In view of applicant's amendment and response filed on 2/25/2004 following final office action is necessitated. Applicant's amendment to the claims overcomes 112 rejection of record.

Claim Rejections - 35 USC § 102

1. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
2. Claims 1-4, 7, 8, 10-13 are rejected under 35 U.S.C. 102(e) as being anticipated by TOPOLKARAEV (US 6,492,452).

The discussion of the disclosure of the prior art of TOPOLKAREV from paragraph 5 of the office action dated 11/25/2003 is incorporated here by reference. Newly added claims 11-13 reciting substituents on ammonium cations are also rejected by the prior art of TOPOLKAREV, since dimethyl bis(hydrogenated tallow) ammonium compound satisfies the limitation of new claims.

Claim Rejections - 35 USC § 103

3. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Art Unit: 1714

4. Claims 5, 6 14, 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over TOPOLKARAEV (US 6,492,452) in view of HYNKOOK (WO 92/13019).

The discussion of the disclosure of the prior art of TOPOLKAREV and HYNKOOK from paragraph 9 of the office action dated 11/25/2003 is incorporated here by reference. The prior art of HYNKOOK further teaches the ester forming component of the copolyester required by newly added claims 14 and 15.

5. Claims 5 and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over TOPOLKARAEV (US 6,492,452) in view of WARZELHAN (US 6,018,004).

The discussion of the disclosure of the prior art of TOPOLKAREV and WARZELHAN from paragraph 10 of the office action dated 11/25/2003 is incorporated here by reference.

6. Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over TOPOLKARAEV (US 6,492,452) in view of BRAGODIA (US 6,395,386).

The discussion of the disclosure of the prior art of TOPOLKAREV and BRAGODIA from paragraph 11 of the office action dated 11/25/2003 is incorporated here by reference.

7. In the response dated 2/25/2004 the applicants argued following:

a) The disclosure of TOPOLKAREV teaches water-responsive polyethylene oxide polymer and organically modified clay, which polymer is different from biodegradable copolyester of the present invention.

Art Unit: 1714

With respect to the above argument the examiner disagrees. The prior art of TOPOLKAREV clearly stated that the PEO water-responsive polymer is illustrated in the examples, however, TOPOLKAREV does not limit its disclosure to only that polymer. The examiner can not rely on the examples alone when considering the prior art but has to rely on the entire disclosure. The fact remains that the prior art of TOPOLKAREV discloses biologically degradable polymers in col. 7, which include co-polyesters (see lines 4-16). These biologically degradable polymers can be mixed with water-responsive polymers.

The clay of TOPOLKAREV is also hydrophobic. Ammonium compound such as dimethyl hydrogenated ditallow gives clay hydrophobic properties.

In addition the fact that the water-responsive polymer is required by the disclosure of TOPOLKAREV does not disqualify this reference as a prior art, since the present claims are open to other polymeric components.

b) The applicants further argue that the prior art of TOPOLKAREV does not suggest or imply any particular effect that will result when modified silicate or clay particles are combined with the polymer.

With respect to the above argument, the applicants should be more specific when stating "particular effects". The examiner will agree that the properties of the compositions change as additives are incorporated, but these properties do depend on the type of the additives. Therefore when clay is added to the composition the net result will be inherent in view of the fact that the properties of clay are the same. In addition, examiner's reasons for combining prior art disclosures do not have to be the same as that of the applicants'.

Art Unit: 1714

c) The examiner failed to establish *prima facie* obviousness in combination of the prior art of TOPOLKAREV with secondary references of HYUKOOK, WARZELHAN and BRAGODIA.

With respect to the above argument, the examiner disagrees. When considering what governs *prima facie* obviousness, as the applicants have stated teachings should be in the same field of endeavour and if not in the same field of endeavour the reference should still be pertinent to the particular problem with which the inventor is involved.

In this case, HYUKOOK and WARZELHAN teach biodegradable polyesters. One of ordinary skill in the art when practicing the teachings of the disclosure of TOPOLKAREV, since it recites biodegradable co-polyester does have to be familiar with them in order to work with them. Such teachings are therefore in the same field of endeavour. When considering the prior art of BRAGODIA, the polyesters are formed from acids their esters or anhydrides regardless if they are biodegradable or not, therefore one of ordinary skill in the art would have now how to polymerize polyester. In this sense, the prior art of BRAGODIA also discloses teachings that, are not only in the same field of endeavour as that of TOPOLKAREV, but also contains pertinent teaching of polymerization of polyester as required by claim 9 and therefore it is very much analogous.

d) Secondary prior art disclosures of HYUKOOK, WARZELHAN and BRAGODIA do not teach improvement of mechanical properties and/or performance characteristics of biodegradable thermoplastic polymers and the second prong is equally not met.

Art Unit: 1714

With respect to the above argument, it is not clear as to what applicants mean by "Second prong. As stated in response to argument b), the properties of the composition are inherent to the components utilized therein.

8. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a).

Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

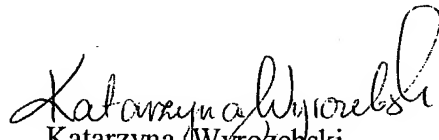
A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Katarzyna Wyrozebski whose telephone number is (571) 272-1127. The examiner can normally be reached on Mon-Thurs 6:30 AM-4:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vasu Jagannathan can be reached on (571) 272-1119. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 1714

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Katarzyna Wyrozebski
Primary Examiner
Art Unit 1714

May 3, 2004

